WHAT IS CLAIMED IS:

1. A substantially pure cocoa extract comprising cocoa polyphenol(s).

2. The extract of claim 1 prepared from a process comprising:

reducing cocoa beans to powder,

defatting the powder, and

extracting and purifying the cocoa polyphenol(s) from the powder.

3. The extract of claim 2 wherein the process of reducing cocoa beans to powder comprises:

freeze drying beans and pulp,

depulping the freeze dried mass,

dehulling the freeze dried cocoa beans, and

grinding the dehulled beans.

4. The extract of any one of claims 2 or 3 wherein the process further comprises purifying the extract by gel permeation chromatography and/or by preparative high performance liquid chromatography (HPLC).

5. The extract of claim 4 containing polyphenol(s) of at least one cocoa procyanidin selected from the group consisting of: (-) epicatechin, procyanidin B-2, procyanidin oligomers 4 through 12, procyanidin B-5, procyanidin A-2 and procyanidin C-1.

6. An antineoplastic composition comprising a substantially pure cocoa extract or synthetic cocoa polyphenol(s) and a suitable carrier.

7. The antineoplastic composition of claim 6 which is comprised of a substantially pure cocoa extract containing cocoa procyanidin(s).

8. The antineoplastic composition of claim 7 wherein the cocoa procyanidin(s) are prepared from a process comprising:

reducing cocoa beans to powder,

defatting the powder, and,

extracting the cocoa procyanidin(s) from the powder.

9. The antineoplastic composition of claim 8 wherein the process of reducing cocoa beans to powder comprises:

freeze drying beans and pulp,
depulping the freeze dried mass,
dehulling the freeze dried cocoa beans, and
grinding the dehulled beans.

10. The antineoplastic compositions of any one of claims 8 or 9 wherein the process further comprises purifying the extract by gel permeation chromatography and/or by preparative high performance liquid chromatography (HPLC).

11. The antineoplastic composition of claim 10 containing polyphenol(s) of at least one cocoa procyanidin selected from the group consisting of: (-) epicatechin, procyanidin B-2, procyanidin oligomers 4 through 12, procyanidin B-5, procyanidin A-2 and procyanidin C-1.

12. A method for treating a patient in need of treatment with an antineoplastic agent comprising administering to the patient an antineoplastic composition comprising an effective quantity of a substantially pure cocoa extract or synthetic cocoa polyphenol(s), and a suitable carrier.

13. The method of claim 12 wherein the antineoplastic agent is comprised of a substantially pure cocoa extract containing cocoa procyanidin(s).

14. The method of claim 13 wherein the cocoa procyanidin(s) are prepared from a process comprising:

reducing cocoa beans to powder,
defatting the powder, and,
extracting the cocoa procyanidin(s) from the powder.

15. The method of claim 14 wherein the process of reducing cocoa pods to powder comprises:

freeze drying beans and pulp,

depulping the freeze dried mass,

dehulling the freeze dried cocoa beans, and

grinding the dehulled beans.

16. The method of any one of claims 14 or 15 wherein the process further comprises purifying the extract by gel permeation chromatography and/or by preparative high performance liquid chromatography (HPLC).

17. The method of claim 16 wherein the extract contains polyphenol(s) of at least one cocoa procyanidin selected from the group consisting of: (-) epicatechin, procyanidin B-2, procyanidin oligomers 4 through 12, procyanidin B-5, procyanidin A-2 and procyanidin C-1.

18. A kit for treating a patient in need of treatment with an antineoplastic agent comprising a substantially pure cocoa extract or synthetic cocoa polyphenol(s) and a suitable carrier.

19. The kit of claim 18 wherein the antineoplastic agent is comprised of a substantially pure cocoa extract containing procyanidin(s); and, the kit includes instructions for admixture of ingredients and/or administration to the patient.

20. A lyophilized antineoplastic composition comprising a substantially pure cocoa extract or synthetic cocoa polyphenol(s).

21. The lyophilized antineoplastic composition of claim 20 wherein the composition is comprised of a substantially pure cocoa extract containing cocoa procyanidin(s).

22. An antioxidant or preservative composition comprising a substantially pure cocoa extract as claimed in claim 1 or synthetic cocoa polyphenol(s).

23. A topoisomerase-inhibiting composition comprising a substantially pure cocoa extract as claimed in claim 1 or synthetic cocoa polyphenol(s).

24. A method for preserving or protecting from oxidation a desired item comprising contacting the item with a composition as claimed in claim 22.

25. The method of claim 24 wherein the item is a foodstuff.

26. A method for inhibiting topoisomerase which comprises contacting topoisomerase with a composition as claimed in claim 23.